

### IN THE SPECIFICATION

Please insert the following heading between lines 24 and 25 on page 1:

#### SUMMARY OF THE INVENTION

Please amend the paragraph at page 1, line 25, as follows:

[[We]] Applicants have found that this object is achieved by an automated synthesis apparatus for carrying out chemical reactions with reflux cooling comprising one or more reactor modules each having one reactor, one or more feed vessels each for a liquid reactant or reactant mixture and also one or more metering and [[feed]] feeding devices for the introduction of liquid reactant or reactant mixture from the feed vessel (the feed vessels) into the reactor, wherein ach reactor has a lid which is configured to a hollow body and encloses a hollow space, with an inlet line and an outlet line for a heat transfer medium into or out of the hollow space and with one or more through-lines for introduction of each liquid reactant or reactant mixture into the reactor.

Please amend the paragraph at page 2 line 21, as follows:

In a preferred variant, the lid is flat and is in particular configured as a flat disk. This geometric configuration is advantageous [[in]] with respect of ease of manufacture, assembly, sealing and cleaning.

Please insert the following heading between lines 9 and 10 on page 3:

#### BRIEF DESCRIPTION OF THE DRAWINGS

Please insert the following heading between lines 21 and 22 on page 3:

#### DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please amend the paragraph at page 4 line 1, as follows:

Figure 2 schematically shows an embodiment of a lid 13 with an integrated reflux condenser for a reactor. In the cross-sectional depiction in Figure 2, fourth through-lines 17 each for one liquid reactant or reactant mixture are shown leading into the reactor. The opening shown as a central double circle, which bears no reference numeral, is intended for accommodation of a stirrer.

Please amend the paragraph at page 4 line 7, as follows:

It can be seen from Figure 2 that, in the particular embodiment shown, the inlet line 15 for the heat transfer medium into the hollow space of the lid 13 projects into the latter and that the outlet line 16 for the heat transfer medium ends flush with the interior wall 18 surrounding the hollow space of the lid 13.

Please amend the paragraph at page 4 line 12, as follows:

The section A/A depicted in Figure 2a makes clear the shape of the lid 13 as a hollow body which encloses a hollow space 14. Figure 2a also shows the through-lines 17 which are extended beyond the lower edge of the lid and also inlet line 15 and outlet line 16 for the heat exchange medium. It can also be seen from Figure 2a that the lid has an increased cross section at ~~[[its]]~~ an underside thereof and at ~~[[its]]~~ an upper side thereof.